

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2004/052120

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G11B17/028

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 050 878 A (HEWLETT PACKARD CO) 8 November 2000 (2000-11-08) column 4, line 57 - column 10, line 52; figures	1-6
X	GB 2 251 116 A (TANASHIN DENKI CO) 24 June 1992 (1992-06-24) page 3, line 8 - page 4, line 28; figure 2	1-6
X	EP 0 499 413 A (SONY CORP) 19 August 1992 (1992-08-19) column 7, line 11 - column 9, line 42; figures 6,7	1-6
X	DE 197 05 002 A (PIONEER ELECTRONIC CORP) 14 August 1997 (1997-08-14) column 2, line 1 - column 4, line 48; figures 2-4	1-6
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

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Date of the actual completion of the international search

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 849 733 A (MATSUSHITA ELECTRIC IND CO LTD) 24 June 1998 (1998-06-24) column 3, line 4 - line 55; figure 27	1-6
A	US 4 408 318 A (SUGIURA YUTAKA) 4 October 1983 (1983-10-04) abstract; figures	1-6
A	US 4 653 041 A (FOOTE JAMES C) 24 March 1987 (1987-03-24) abstract; figures	1-6
A	US 4 791 624 A (STINESEN BERNARDUS J) 13 December 1988 (1988-12-13) abstract; figures	1-6
A	EP 0 598 330 A (THOMSON BRANDT GMBH) 25 May 1994 (1994-05-25) abstract; figures	1-6
A	WO 00/74050 A (WADA SHINICHI ; MATSUSHITA ELECTRIC IND CO LTD (JP)) 7 December 2000 (2000-12-07) abstract; figures	1-6
A	WO 02/080165 A (KONINKL PHILIPS ELECTRONICS NV) 10 October 2002 (2002-10-10) cited in the application abstract; figures	1-6

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/052120

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1050878	A	08-11-2000	US 6252843 B1 EP 1050878 A1 JP 2000306304 A	26-06-2001 08-11-2000 02-11-2000
GB 2251116	A	24-06-1992	HK 13695 A JP 2775351 B2 JP 4251480 A SG 172594 G US 5177731 A	10-02-1995 16-07-1998 07-09-1992 28-04-1995 05-01-1993
EP 0499413	A	19-08-1992	AT 157799 T AU 648383 B2 AU 1088592 A BR 9200469 A CA 2060923 A1 DE 69221911 D1 DE 69221911 T2 EP 0499413 A1 ES 2106823 T3 HK 1011449 A1 HU 63268 A2 JP 3298651 B2 JP 5089515 A JP 3326692 B2 JP 2002042436 A PL 293444 A1 PL 169007 B3 US 6252842 B1 ZA 9200991 A JP 3208806 B2 JP 5074026 A MX 9200579 A1	15-09-1997 21-04-1994 20-08-1992 20-10-1992 13-08-1992 09-10-1997 12-02-1998 19-08-1992 16-11-1997 28-04-2000 28-07-1993 02-07-2002 09-04-1993 24-09-2002 08-02-2002 16-11-1992 31-05-1996 26-06-2001 25-11-1992 17-09-2001 26-03-1993 01-11-1993
DE 19705002	A	14-08-1997	JP 9219038 A DE 19705002 A1 US 6011771 A	19-08-1997 14-08-1997 04-01-2000
EP 0849733	A	24-06-1998	JP 3355973 B2 JP 10188418 A CN 1185624 A ,B DE 69721202 D1 DE 69721202 T2 EP 0849733 A1 US 6041033 A JP 11073722 A	09-12-2002 21-07-1998 24-06-1998 28-05-2003 25-03-2004 24-06-1998 21-03-2000 16-03-1999
US 4408318	A	04-10-1983	JP 54176306 U DE 2952816 C2 DE 2952816 T0 WO 7901162 A1	13-12-1979 15-09-1988 08-01-1981 27-12-1979
US 4653041	A	24-03-1987	NONE	
US 4791624	A	13-12-1988	NL 8503523 A DE 3670171 D1 EP 0228126 A1 HK 91191 A JP 2529675 B2	16-07-1987 10-05-1990 08-07-1987 22-11-1991 28-08-1996

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/052120

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4791624	A		JP 62157362 A	13-07-1987
EP 0598330	A	25-05-1994	DE 4238941 A1	26-05-1994
			CN 1090669 A ,B	10-08-1994
			DE 59308104 D1	12-03-1998
			EP 0598330 A2	25-05-1994
			ES 2113987 T3	16-05-1998
			HK 1005349 A1	31-12-1998
			JP 6215531 A	05-08-1994
			KR 258127 B1	01-06-2000
			SG 46653 A1	20-02-1998
			US 5600625 A	04-02-1997
WO 0074050	A	07-12-2000	JP 2000339802 A	08-12-2000
			CN 1354879 T	19-06-2002
			WO 0074050 A1	07-12-2000
			TW 468154 B	11-12-2001
			US 6826771 B1	30-11-2004
WO 02080165	A	10-10-2002	WO 02080165 A1	10-10-2002
			US 2002157579 A1	31-10-2002